REMARKS

Claims 1-4, 6, 7, 9-11, 13, 17, 35, 38, 40, 49, 50, 115 and 130-134 are currently pending in the application. Claims 5, 8, 12, 14-16, 18-34, 36, 37, 39, 41-48, 51-114 and 116-129 have been cancelled herein without prejudice or disclaimer. Claims 130-134 have been added. No new matter has been added in any of these amendments. Briefly, the amendments are aimed at decreasing the total number of claims in the application through combining some claims and eliminating multiple dependencies in some claims and canceling other claims. The amendments are also designed to conform the claims more closely to US practice. Entry of these claims prior to substantive examination is earnestly solicited.

Enclosed herewith in full compliance with 37 C.F.R. §§1.821-1.825 is a Substitute Sequence Listing to be inserted into the specification as indicated above. The Substitute Sequence Listing in no way introduces new matter into the specification. Also submitted herewith in full compliance with 37 C.F.R. §§1.821-1.825 is a disk copy of the Substitute Sequence Listing. The disk copy of the Substitute Sequence Listing, file "2006-06-23 0641-0278PUS1.txt", is identical to the paper copy, except that it lacks formatting.

The specification is amended to properly identify each nucleotide sequence from the figures and any other sequences disclosed in the specification with a corresponding SEQ ID NO. The Sequence Listing is amended to include the sequences of SEQ ID NOS: 5 and 6 that were inadvertently omitted from the original Sequence Listing. The sequences of SEQ ID NOS: 5 and 6 were disclosed in the specification as originally filed. The Sequence Listing is further amended to identify the present application by filing date and serial number and to correct matters of form. No new matter is introduced by these amendments.

Application No. 10/563,360

If the Examiner has any questions or comments, please contact Thomas J. Siepmann, Ph.D., Registration No 57,374 at the offices of Birch, Stewart, Kolasch & Birch, LLP.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

AUG 1 8 2006

Respectfully submitted,

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GMM/TJS/psq/kj

Attachments:

0641-0278PUS1

Disk Copy of Substitute Sequence Listing Paper Copy of Substitute Sequence Listing Copy of Notification of Missing Requirements